

CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Cancelled)

2. (Currently amended) A homozygous transgenic mouse having incorporated into its genome a transgene comprising a nucleic acid encoding a mouse cardiac alpha myosin heavy chain comprising an S342G mutation in ATPase loop 1 of the cardiac alpha myosin heavy chain, which reduces electrostatic interaction between ATPase loop 1 and interactive micro-domain of said cardiac alpha myosin heavy chain, thereby reducing an ADP dissociation rate of said mouse cardiac alpha myosin heavy chain wherein said mouse cardiac alpha myosin heavy chain exhibits: (a) reduced contractility (speed of contraction); and (b) increased power generating work capacity resulting in the transgenic mouse exhibiting a reduced heart rate.

3-14. (Cancelled)